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Department of Energy

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Mr. Gary Baughman Hazardous Waste Facilities Unit Leader Colorado Department of Health 4210 East 11th Avenue Denver, CO 80220 ANC D 3 D7 F/1 32

ROCKY FLANS PLANT
ROCKE SPONS PLANT

Gentlemen:

Please find enclosed the DOE/RFO response to comments expressed in the CDH letter of May 8, 1992, granting conditional approval of the Final RCRA Facilities Investigation/Remedial Investigation (RFI/RI) Work Plan for Operable Unit No. 11, the West Spray Field. DOE/RFO believes the enclosed should satisfy your expressed concerns.

If you have any questions, please call Robert H. Birk of my staff at 966-5921.

Sincerely,

Frazer R. Lockhart

Director

Environmental Restoration Division

CORRES CONTROL X X

Reviewed for Addressee Corres. Control RFP

DATE

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RF-46522 (Rev. 6/92)

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## RESPONSE FOR CONDITIONALLY APPROVED FINAL RCRA FACILITIES INVESTIGATION/REMEDIAL INVESTIGATION (RFI/RI) WORK PLAN FOR OPERABLE UNIT NO. 11, WEST SPRAY FIELD

The CDH letter of May 8, 1992 regarding the Operable Unit No. 11 (OU 11), West Spray Field, identifies four comments that must be addressed prior to initiating field work. Comment numbers 1 and 2 involve soil sampling. Specifically, they are:

- The EMD SOP GT.8 must be revised to include procedures for vertical profile soil sampling relative to radionuclides.
- The EMD SOP GT.8 must be revised to include procedures for the Tube Sampler relative to non-radionuclide soil sampling.

Proposed resolution: The referenced vertical profile soil samples are related to radionuclide sampling of the test pits. Sampling procedures for test pits and vertical soil distribution are detailed in EMD SOP GT.7. The text will be modified to employ EMD SOP GT.8 methods for radionuclide surface sampling at the pit locations prior to excavation. This will be done in order to establish statistical comparability with the surface scrapes being taken elsewhere in OU 11. The CDH method is effective for sampling areas where wind blown deposition of radionuclides is suspected. The major activity for potential radionuclide deposition at OU 11 is spray application. Where large volumes of water are deposited and the length of time since application has been relatively long, on the order of 7 years, it would be prudent to obtain sample composites from depths of 0-2 inches. This would compensate for any "veneer" or soil build up since the application events that may mask actual concentrations. We propose that the Rocky Flats (RF) method be used for collection of all radionuclide surficial soil samples. This methodology may be revised at a later date to be consistent with new standard operating procedures under development that may reflect a revised CDH method or equivalent. Any subsequent revision to this procedure would be accomplished via Document Change Notice (DCN).

Any non-radionuclide sampling will be performed consistently with EMD SOP GT.8 rather than using the proposed tube sampler. This will ensure consistency with accepted plant-wide standards and maintain statistical comparability.

Comment number 3 stated a concern for the adequacy of test pits alone to meet the statistical performance measures of power and confidence for radionuclides.

Proposed resolution: It was never intended to make power and confidence determinations exclusively with test pit data. Section 7, page 14 of 27, second paragraph states that grab samples will also be taken along with the test pit samples. Section 7, page 8 of 27, second paragraph states that a minimum of 46 additional grab samples will be taken. We propose that rather than commit to a pre-determined number, we assess the variability of radionuclide concentrations within OU 11 with the High Purity Germanium Crystal Detector (HPGe). The lower the radionuclide concentration variability within OU 11, the fewer samples necessary for statistical characterization. By employing the HPGe as a screening method to assess variability within OU 11 as well as to identify any existing hot spots we will be able to more clearly determine statistical sampling parameters and better determine confirmation sampling sites.



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Sampling site locations would be a combination of HPGE positive sites and an established grid pattern. This process may reduce the surficial sample number requirements which would positively impact both schedule and budget. Sampling numbers and locations would be detailed and negotiated with the agencies by technical memorandum.

Comment number 4 stated that an OU specific health and safety plan must be generated and submitted to the agencies.

Proposed resolution: The OU specific health and safety plan will be generated prior to initiating any field activities. This plan will be submitted the agencies for review and comment.

Three additional comments were identified that should be considered but do not impact initiation of the wok plan implementation. The specific comments as well as the proposed resolutions are outlined below.

Comment number 5 stated that a modified conceptual model flowchart, Figure 2-10, should be incorporated into the document.

Proposed resolution: An arrow will be drawn from Deposition/Precipitation to Re-suspension/Dissolution to Surface Water to complete the circle for re-mobilization.

Comment number 6 stated that a technical memorandum should be developed for surficial soil scrapes to confirm HPGe negative results and provide data on non-gamma emitters.

Proposed resolution: As stated above, confirmation samples will be taken after the HPGe survey. Vertical distribution sampling is covered in SOP GT.7. The number of samples taken as well as the locations will be based on the HPGe results and the variability of radionuclide concentrations within the OU. Confirmation samples will be collected according to SOP guidance now under development. The total number of samples, the locations, and the SOP will be detailed in a technical memorandum.

Comment number 7 references chemical-specific benchmarks and the need to incorporate them as tables into the work plan once the tables are approved.

Proposed resolution: Benchmark tables containing standards for air, soil, groundwater, and surface water will be incorporated into the work plan once they are approved.

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